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EXAMINER

YE, LIN

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/867,607	Applicant(s) INOUE ET AL.	
	Examiner Lin Ye	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 filed on 1/27/06, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/27/05 has been entered.
2. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 4, 5 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Steve's DigiCams: "PowerShot S10 User Review", [Online] 1999, Internet address: <
http://www.steves-digicams.com/pdf/canon_s10.pdf >.

Referring to claim 1, the Steve reference discloses in page 11 (a user review of the Canon PowerShot S10 digital camera), an image quality selecting method, comprising the steps of: displaying selectable candidates for a number of imaging pixels ("L" as 1600x1200, "M" as 800x600 or "S" as 640x480) and image compression rates ("S" as Super-Fine, "F" as Fine, or "N" as Normal) in a two-dimensional arrangement on a setting screen for setting an image quality; presenting to a user combinations of selectable number of imaging pixels and the image compression rates and at the same time receiving an instruction for moving a cursor on the setting screen, wherein the number of imaging pixels and the image compression rates are each directly selectable; and changing a setting to the number of pixels and the image compression rate which are pointed by the cursor after designating a position of the cursor.

Referring to claim 4, the Steve reference discloses all subject matter as discussed in respected claim 1, and Steve reference discloses the camera setting data which have been set in a previous setting is stored; and wherein camera setting data is changed by key operation part (e.g., Menu/set rocker switch and 4-way switch navigates through the choices and the Set button accepts the choice, See page 5), the cursor automatically moves to a position of the other of camera setting data in the previous setting according to the stored information (i.e., See camera specifications, pages 8-9 and 16).

Referring to claim 5, the Steve reference discloses camera setting data is changed by key operation part (e.g., Menu/set rocker switch and 4-way switch navigates through the choices

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and the Set button accepts the choice, See page 5), the cursor automatically moves to a position of the other of camera setting data in a predetermined default (see page 11).

Referring to claim 11, the Steve reference discloses the number of imaging pixels and the image compression rates are changed independently (See page 11).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steve's DigiCams: "PowerShot S10 User Review", [Online] 1999, Internet address: <
http://www.steves-digicams.com/pdf/canon_s10.pdf > in view of Mizoguchi U.S. Patent 6,407,772.

Referring to claims 2-3, the Steve reference discloses all subject matter as discussed in respected claim 1, except that the Steve reference does not explicitly show the remaining number of images for recording still images or a remaining time for recording a moving images are displayed on the setting screen.

The Mizoguchi reference discloses in Figure 2-6, the digital camera can record still images or moving images, the remaining number of images or a remaining time is displayed

on the setting screen according to the image quality recording mode selected (See Col. 3, lines 51-67). The Mizoguchi reference is evidence that one of ordinary skill in the art at the time of the invention to see more advantages for the camera system be able to display the remaining number images for recording still images and remaining time for recording moving image so that the user can easily to see the capacity of recording device without need separate storages for still images and moving images. For that reason, it would have been obvious that one of ordinary skill in the art at the time of the invention to modify the Canon PowerShot S10 digital camera system (Steve) for providing a method to see the remaining number of images for recording still images or a remaining time for recording a moving images are displayed on the setting screen in accordance with the number of imaging pixels and image compression rate which are selected with the cursor as taught by Mizoguchi.

7. Claims 6, 9-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. U.S. Patent 6,337,928 in view of Steve's DigiCams: "PowerShot S10 User Review", [Online] 1999, Internet address: < http://www.steves-digicams.com/pdf/canon_s10.pdf >.

Referring to claim 6, the Takahashi reference discloses in Figures 1 and 7, a single digital camera integrates the taking lens (101), imaging device (102) that converts light which enters through said taking lens into electric signals (see Col. 5, lines 57-61); signal processing part (105) for processing the signal outputted from said imaging device; a recording instruction (control circuit 106) input operation part that instructs start of recording in order to obtain an image; a recording device (memory 107) that records an image in a storage medium (See col.

5, lines 62-67 and Col. 6, lines 15-22), the image being photographed in response to an operation of said recording instruction input operation part and a display device (EVF 112 for displaying an image and image pickup information, See col. 3, lines 4-6) that displays a setting screen for setting an image quality as shown in Figure 7; a display control device that displays selectable candidates for number of imaging pixels and image compression rates on the setting screen of said display device, and presenting combinations of selectable numbers of pixels and compression rate (the number of pixels and compression rate are set in various manners by operating slide switches 705 to 710, See Col. 6, lines 46-53). However, the reference does not explicitly to show a detail for select recording quality mode by moving a cursor on the setting screen, wherein the selectable candidates present combinations of **directly** selectable numbers of pixels and compression rates.

The Steve reference discloses in pages 1-2 and 11, the Cannon PowerShot S10 digital camera system is able to select recording quality mode by moving a cursor on the setting screen, wherein the selectable candidates present combinations of **directly** selectable numbers of pixels and compression rates. The Steven reference is evidence that one of ordinary skill in the art at the time to see more advantages for the digital camera system using instruction key to move a cursor on the setting screen, wherein the selectable candidates present combinations of **directly** selectable numbers of pixels and compression rates so that the camera setting mode or data can be quickly and easily selected by user. For that reason, it would have been obvious that one of ordinary skill in the art at the time of the invention to see the camera system receiving an instruction for moving a cursor on the setting screen; and changing a setting to the number of pixels and the image compression rate

which are pointed by the cursor after designating a position of the cursor, wherein the selectable candidates present combinations of **directly** selectable numbers of pixels and compression rates disclosed by Takahashi.

Referring to claim 9, the Takahashi and Steve references disclose all subject matter as discussed in respected to claim 6, and the Steven reference disclose the camera setting data which have been set in a previous setting is stored; and wherein camera setting data is changed by key operation part (e.g., Menu/set rocker switch and 4-way switch navigates through the choices and the Set button accepts the choice, See page 5), the cursor automatically moves to a position of the other of camera setting data in the previous setting according to the stored information (i.e., See Cannon PowerShot S10 specification, page 8-9).

Referring to claim 10, the Takahashi and Steve references disclose all subject matter as discussed in respected claim 6, and the Steven reference disclose camera setting data is changed by key operation part (e.g., Menu/set rocker switch and 4-way switch navigates through the choices and the Set button accepts the choice, See page 5), the cursor automatically moves to a position of the other of camera setting data in a predetermined default (see page 11).

Referring to claim 14, the Takahashi and Steve references disclose all subject matter as discussed in respected to same comments with claim 6.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. U.S. Patent 6,337,928 in view of Steve's DigiCams: "PowerShot S10 User Review", [Online]

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1999, Internet address: < http://www.steves-digicams.com/pdf/canon_sl0.pdf > and

Mizoguchi U.S. Patent 6,407,772.

Referring to claim 7, the Takahashi and Steve references disclose all subject matter as discussed in respected claim 6, except that the Takahashi reference does not explicitly show the remaining number of images for recording still images or a remaining time for recording a moving images are displayed on the setting screen.

The Mizoguchi reference discloses in Figure 2-6, the digital camera can record still images or moving images, a calculation device (CPU 14) that calculating at least one of the number of photographable images and a remaining time for recording a moving image from capacity of said storage medium with respect to recording mode set the remaining number of images or a remaining time is displayed on the setting screen according to the image quality recording mode selected (See Col. 3, lines 51-67). The Mizoguchi reference is evidence that one of ordinary skill in the art at the time to see more advantages for the camera system be able to display the remaining number images for recording still images and remaining time for recording moving image so that the user can easily to see the capacity of recording device without need separate storages for still images and moving images. For that reason, it would have been obvious that one of ordinary skill in the art at the time of the invention to see the remaining number of images for recording still images or a remaining time for recording a moving images are displayed on the setting screen in accordance with the number of imaging pixels and image compression rate which are selected with the cursor disclosed by Takahashi.

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9. Claims 8, 22, 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. U.S. Patent 6,337,928 in view of Steve's DigiCams: "PowerShot S10 User Review", [Online] 1999, Internet address: < http://www.steves-digicams.com/pdf/canon_s10.pdf >, Mizoguchi U.S. Patent 6,407,772 and Akazuka J.P. 62252583. (It should be noted that the Akazuka reference has been cited in the last PTO-892 mailed on 8/12/04).

Referring to claim 8, the Takahashi, Steve and Mizoguchi references disclose all subject matter as discussed in respected claims 6-7, except the references do not explicitly show a table is prepared in which one of the selectable candidates for said number of imaging pixels and the image compression rate is horizontally lined up as a row, and the other is vertically lined up as a column on said setting screen.

The Akazuka reference teaches in Figure 1 and Table 1 (in page 6), a table is prepared in which one of the selectable candidates for said number of imaging pixels and the image compression rate is horizontally lined up as a row, and the other is vertically lined up as a column on said setting screen; and the remaining capacity for recording a moving image for the combination is displayed in each cell of the table on the display part (6) (See pages 3-5). The Akazuka reference is evidence that one of ordinary skill in the art at the time to see more advantages for the camera system has more flexible design options to be able displaying a table to show both image compression rate and number of imaging pixels has been selected on the selected screen so that user can see what kind size of image will be produced more easily and estimate remained capability of storage in the camera quickly. For that reason, it would have been obvious that one of ordinary skill in the art at the time of the invention to

see the camera system be able to display a table is prepared in which one of the selectable candidates for said number of imaging pixels and the image compression rate is horizontally lined up as a row, and the other is vertically lined up as a column on said setting screen by Takahashi.

Referring to claim 22, the Takahashi, Steve, Mizoguchi and Akazuka references disclose all subject matter as discussed in respected with same comments to claim 8, and the Akazuka reference discloses wherein the selectable candidates are arranged in a two-dimensional matrix (see Table 1, in page 6) having a plurality of selectable cells, each selectable cell corresponds to a combination of number of pixels and image compression rate, and is designated by a user to set the number of pixels and image compression rate (See pages 3-5).

Referring to claim 23, the Takahashi, Steve, Mizoguchi and Akazuka references disclose all subject matter as discussed in respected with same comments to claims 14 and 22.

Referring to claim 25, the Takahashi, Steve, Mizoguchi and Akazuka references disclose all subject matter as discussed in respected with same comments to claim 22, and the Akazuka reference discloses wherein each column of the two-dimensional matrix corresponds to one of a predetermined number of pixels, and each row of the two-dimensional matrix corresponds to the other of the predetermined compression rate as shown in Table 1 (page 6).

Referring to claim 26, the Takahashi, Steve, Mizoguchi and Akazuka references disclose all subject matter as discussed in respected with same comments to claims 23 and 25.

10. Claims 12-13, 18-19, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steve's DigiCams: "PowerShot S10 User Review", [Online] 1999, Internet address: < http://www.steves-digicams.com/pdf/canon_s10.pdf > in view of Akazuka J.P. 62252583.

Referring to claims 12-13, the Steven reference disclose all subject matter as discussed in respected claim 1, except the references do not explicitly show the system can either the number of candidates for the number of imaging pixels will depend upon the image compression rate selected, or the number of candidates for the image compression rates will depend upon the number of imaging pixels selected.

The Akazuka reference teaches in Figure 1 and Table 1 (in page 6), a table is prepared in which one of the selectable candidates for said number of imaging pixels and the image compression rate is horizontally lined up as a row, and the other is vertically lined up as a column on said setting screen (See pages 3-5); and the system can either the number of candidates for the number of imaging pixels will depend upon the image compression rate selected (e.g., when the fields in the table selected horizontally form left to right), or the number of candidates for the image compression rates will depend upon the number of imaging pixels selected (e.g., when the fields in the table selected vertically form top to bottom). The Akazuka reference is evidence that one of ordinary skill in the art at the time to see more advantages for the image system be able to either the number of candidates for the number of imaging pixels will depend upon the image compression rate selected, or the number of candidates for the image compression rates will depend upon the number of imaging pixels selected, so that providing more flexible choices for setting image quality for the user. For that reason, it would have been obvious one of ordinary skill in the art at the

time to modify the Cannon PowerShot S10 digital camera system (Steve) for providing either the number of candidates for the number of imaging pixels will depend upon the image compression rate selected, or the number of candidates for the image compression rates will depend upon the number of imaging pixels selected as taught by Akazuka.

Referring to claim 18, the Steve and Akazuka references disclose all subject matter as discussed in respected claim 12, and the Akazuka reference discloses wherein row headings of the table correspond to selectable image compression rates (e.g., vertically lined up as a row correspond to image compression rates) and column heading of the table correspond to image pixel quantities (e.g., horizontally lined up as a column correspond to image pixel quantities).

Referring to claim 19, the Steve and Akazuka references disclose all subject matter as discussed in respected claim 12, and the Akazuka reference discloses wherein row headings of the table correspond to selectable image pixel quantities (e.g., horizontally lined up as a row correspond to image compression rates) and column heading of the table correspond to selectable image compression rates (e.g., vertically lined up as a column correspond to image pixel quantities).

Referring to claim 21, the Steve and Akazuka references disclose all subject matter as discussed in respected with same comments to claims 12-13, and the Akazuka reference discloses wherein the selectable candidates are arranged in a two-dimensional matrix (see Table 1, in page 6) having a plurality of selectable cells, each selectable cell corresponds to a combination of number of pixels and image compression rate, and is designated by a user to set the number of pixels and image compression rate (See pages 3-5).

Referring to claim 24, the Steve and Akazuka references disclose all subject matter as discussed in respected with same comments to claim 21, and the Akazuka reference discloses wherein each column of the two-dimensional matrix corresponds to one of a predetermined number of pixels, and each row of the two-dimensional matrix corresponds to the other of the predetermined compression rate as shown in Table 1 (page 6).

11. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. U.S. Patent 6,337,928 in view of Steve's DigiCams: "PowerShot S10 User Review", [Online] 1999, Internet address: < http://www.steves-digicams.com/pdf/canon_s10.pdf > and Akazuka J.P. 62252583.

Referring to claims 15-17, the Takahashi and Steve references disclose all subject matter as discussed in respected claim 1, except the Takahashi reference does not explicitly show the system including a table having the selectable options that can either the number of candidates for the number of imaging pixels will depend upon the image compression rate selected, or the number of candidates for the image compression rates will depend upon the number of imaging pixels selected.

The Akazuka reference teaches in Figure 1 and Table 1 (in page 6), a table is prepared in which one of the selectable candidates for said number of imaging pixels and the image compression rate is horizontally lined up as a row, and the other is vertically lined up as a column on said setting screen (See pages 3-5); and the system can either the number of candidates for the number of imaging pixels will depend upon the image compression rate selected (e.g., when the fields in the table selected horizontally form left to right), or the

number of candidates for the image compression rates will depend upon the number of imaging pixels selected (e.g., when the fields in the table selected vertically form top to bottom). The Akazuka reference is evidence that one of ordinary skill in the art at the time to see more advantages for the image system be able to either the number of candidates for the number of imaging pixels will depend upon the image compression rate selected, or the number of candidates for the image compression rates will depend upon the number of imaging pixels selected, so that providing more flexible choices for setting image quality for the user. For that reason, it would have been obvious one of ordinary skill in the art at the time to modify the digital camera system of Takahashi for providing a table having the selectable options that can either the number of candidates for the number of imaging pixels will depend upon the image compression rate selected, or the number of candidates for the image compression rates will depend upon the number of imaging pixels selected as taught by Akazuka.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steve's DigiCams:

"PowerShot S10 User Review", [Online] 1999, Internet address: < http://www.steves-digicams.com/pdf/canon_s10.pdf > in view of Akazuka J.P. 62252583 and Mizoguchi U.S. Patent 6,407,772.

Referring to claim 20, the Steve and Akazuka references disclose all subject matter as discussed in respected claims 12, 18 and 19, except that the references do not explicitly show the remaining number of images for recoding still images or a remaining time for recording a moving images are displayed on the setting screen.

The Mizoguchi reference discloses in Figure 2-6, the digital camera can record still images or moving images, a calculation device (CPU 14) that calculating at least one of the number of photographable images and a remaining time for recording a moving image from capacity of said storage medium with respect to recording mode set the remaining number of images or a remaining time is displayed on the setting screen according to the image quality recording mode selected (See Col. 3, lines 51-67). The Mizoguchi reference is evidence that one of ordinary skill in the art at the time to see more advantages for the camera system be able to display the remaining number images for recording still images and remaining time for recording moving image so that the user can easily to see the capacity of recording device without need separate storages for still images and moving images. For that reason, it would have been obvious that one of ordinary skill in the art at the time of the invention to modify the Canon PowerShot S10 digital camera system (Steve) for providing a method to see the remaining number of images for recording still images or a remaining time for recording a moving images within the table displayed on the setting screen as taught by Mizoguchi.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Lin Ye', with a stylized, flowing script.

Lin Ye
Examiner
Technology Division 2622

March 2, 2006